

# **GLOBAL AWARENESS PRODUCT AREA DIRECTORATE**



**HORIZONS**  
**14 November 1997**

**Briefer:**  
**Bill Keto, Acting Director**  
**Global Awareness PAD**

# Overview



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*Global Awareness Product Area Directorate*

- **Background/C2 Vision**
- **Global Awareness**
- **PAD Vision**
- **PAD Mission**
- **PAD Functions**
- **PAD Organization**
- **Business Opportunities**

# Common C2 Objective Guidance



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## Joint Vision 2010: Full Spectrum Dominance



*"Information superiority will provide a commander with enhanced awareness in his area of responsibility whether his objective is to [perform] peacetime engagement, deterrence and conflict prevention, and/or fight and win"*

## Global Engagement



*"Providing Full Spectrum Dominance requires a truly interactive common battlespace picture. The Air Force is committed to providing the integrated global and theater air, space and surface picture of the battlespace to the 21st century joint force commander"*

# Common C2 Objective Guidance



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## ◆ C2 Summit

- ◆ Provide Global Awareness to Joint Force in 21st century
- ◆ Field a C2 System for the Air & Space Commander to enable dynamic assessment, planning, & execution
  - Global & near real-time
  - Tailorable
  - Horizontally & vertically integrated





# The Requirement

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**The right information at the right time displayed in  
the  
right way so.....**

**Commanders can do the right things at the right  
time in the right way**

**Information superiority - Key enabler**

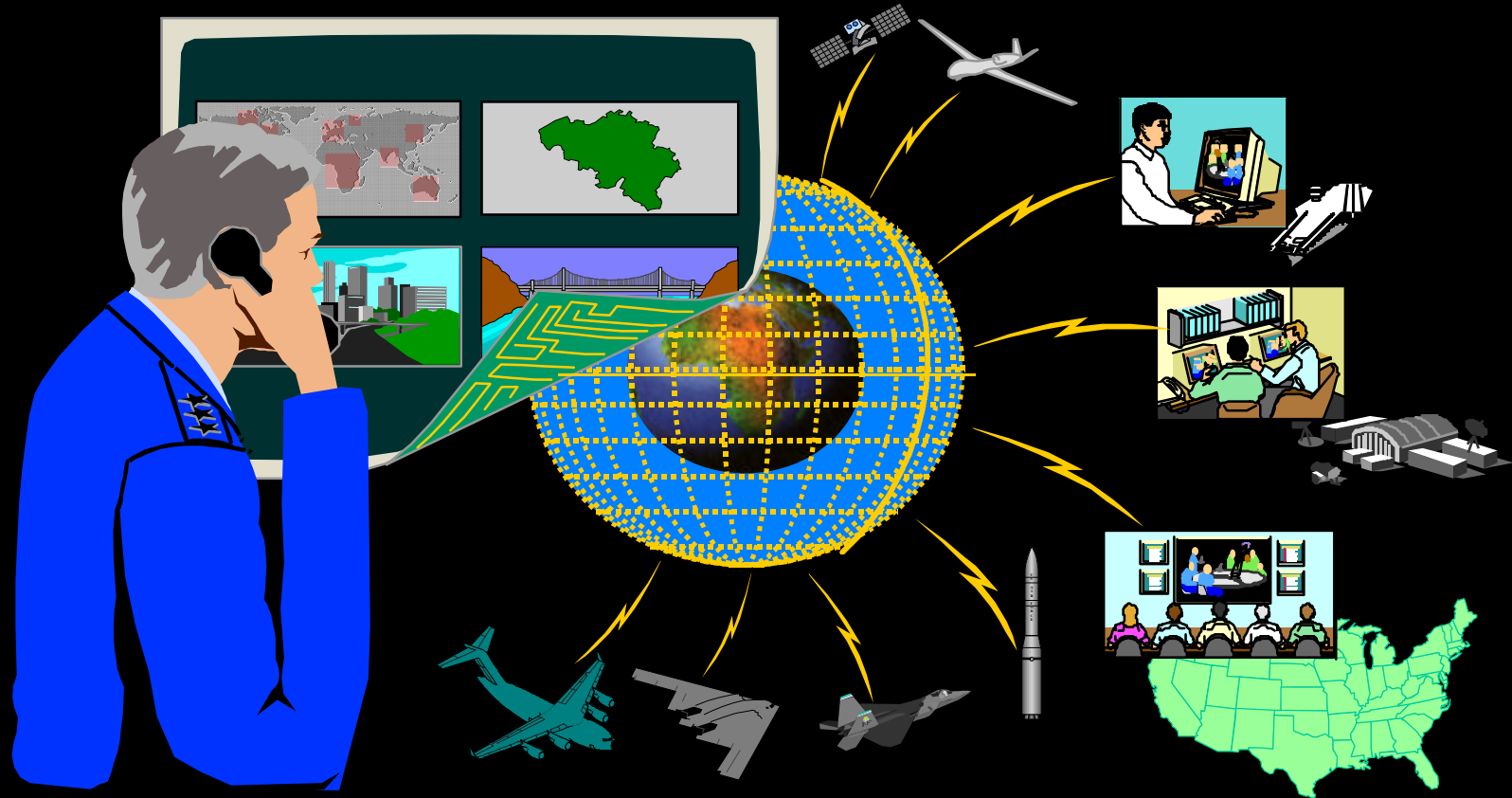
# *C2 Vision* **Top-Level Operational Concept**



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Centralized Control

Decentralized Execution



*A joint distributed, collaborative environment,  
moving information -- not people*

# Air & Space C2 Vision



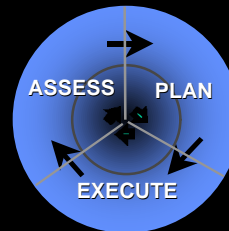
## Global Awareness Product Area Directorate

### Vision

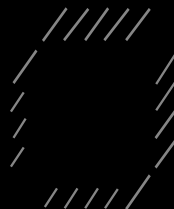
Global Awareness



DAPE



Global Grid



Institutional Air Force



### Focus Areas

Collection  
Fusion  
Common Picture  
C2 Centers

C2 Applications

Communications

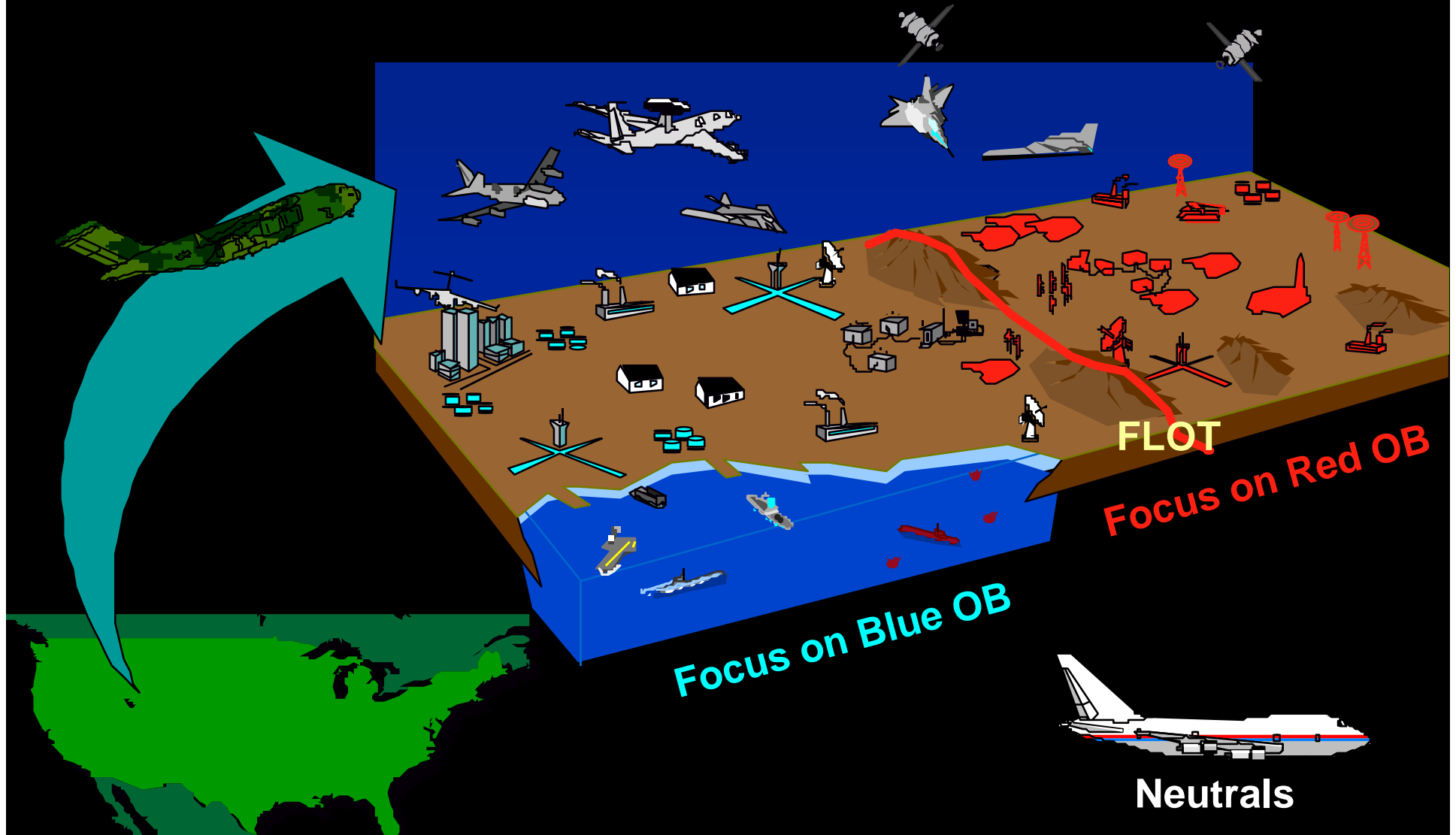
Common Environment

Operational Process  
Doctrine & Policy  
Organization  
People

# Tomorrow's Dominant Battlespace Awareness



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# *C2 Vision*

## **Global Awareness**

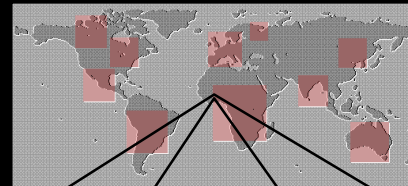


### *Global Awareness Product Area Directorate*

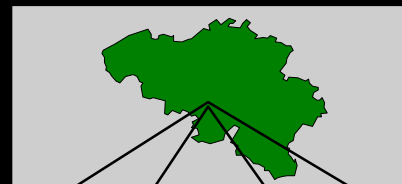
Integrated information & displays  
providing to the JFC:

- ◆ Parallel & continuous information
- ◆ Common battlespace awareness
- ◆ Red, blue & gray knowledge across all operational domains  
(air, space, surface, sub-surface, information)

Using available sensors  
to find, fix, track & target  
in near real-time



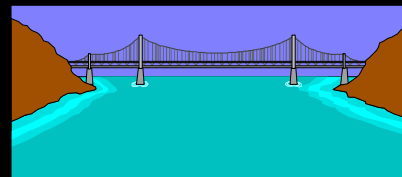
**GLOBAL**



**FORCE**



**MISSION**



**ENGAGEMENT**

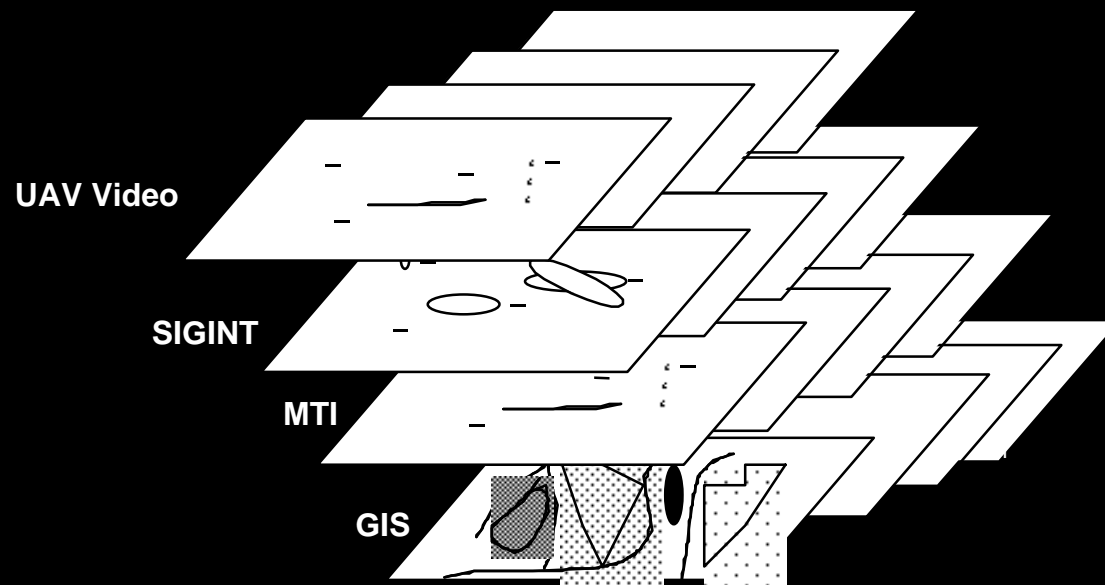
***The Air Force will make available an integrated battlespace picture for the NCA, JFC & the joint force team***

# Correlated & Fused Picture



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Information has three dimensional data

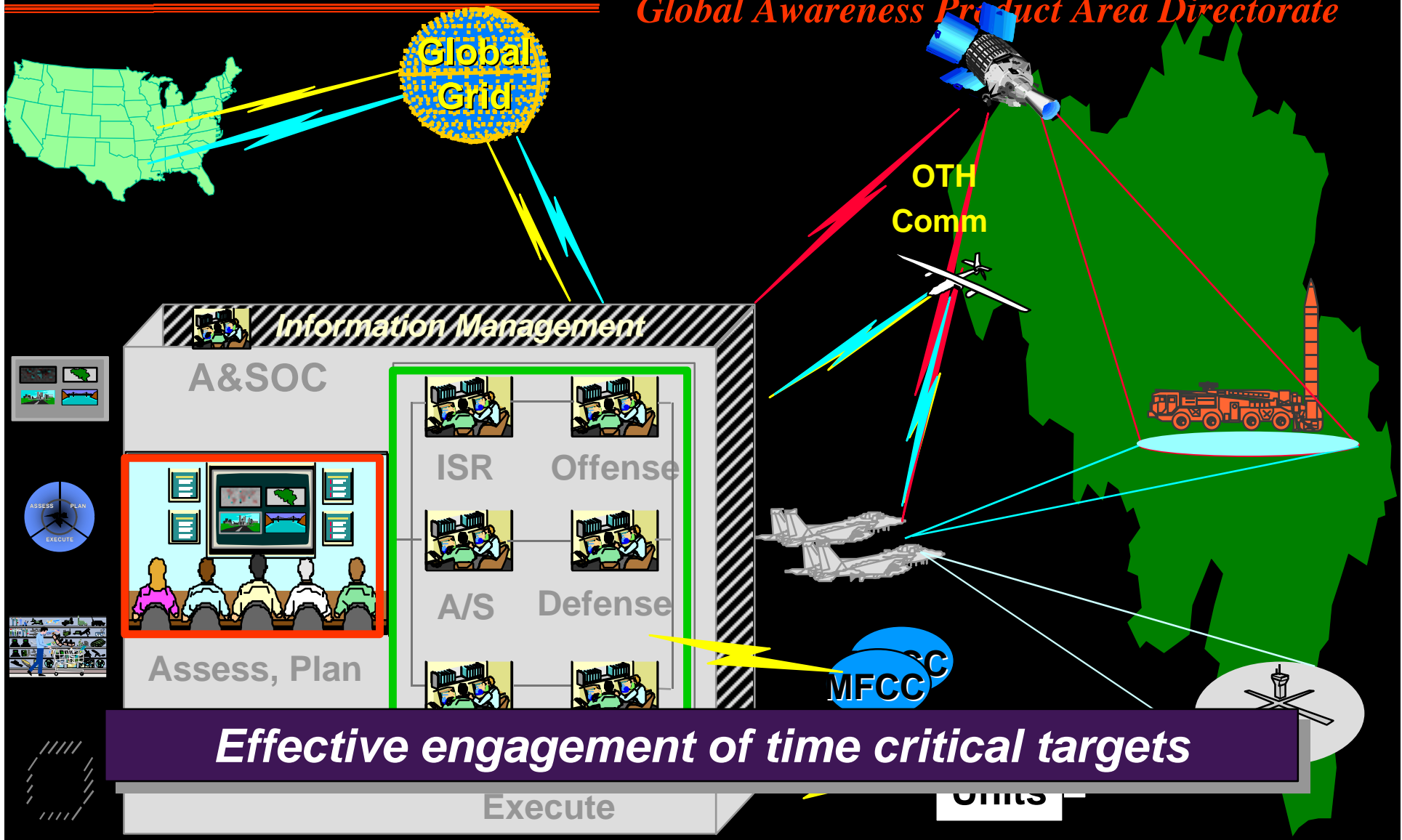


- Space (x,y,z)
- Time
- Attributes

# C2 Vision Ops Concept -- Retargeting



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# *C2 Vision*

## **What Must Change**



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### *Global Awareness*

#### Collection

- ◆ Limited near real-time precision information on enemy locations & movement to support targeting & BDA
- ◆ Limited asset/force visibility to support planning & execution decision-making

#### Fusion

- Joint & coalition data, not correlated & fused, nor presented in a common, tailorable, geo-referenced, user friendly, operational picture in near real-time

#### Display

- Warfighter lacks combat information...limited ability to tailor information to specific needs in near real-time



# ASC2A

**CC/CV**  
**MGen Hawley**  
**Command**  
**Section**  
*Col Webber*

**Technical  
Advisor**  
*Mr Barringer*

**ASC2A Field  
Agency(s)**  
*Col Lindsley*  
*Col Carpenter*

**Plans & Programs  
Integration**  
*Col Ranne*

**Force Development  
& Experiments**  
*Col Mc Crabb*  
*Col M Brooks*

**Mission Area  
Plan & Analysis**

**Combat Air  
& Space  
Forces**  
*Col Madden*

**Global  
Mobility  
Forces**  
*Col Bunn*

**Nuclear  
Forces**

**Information  
Operations  
Forces**  
*Col Stevens*

**Agile Combat  
Support  
Forces**  
*Col Meyer*

**Special  
Operations**  
*Col Huincker*

## Constructive Competition Matrix

**Centers and  
Applications**  
*Col Junge*

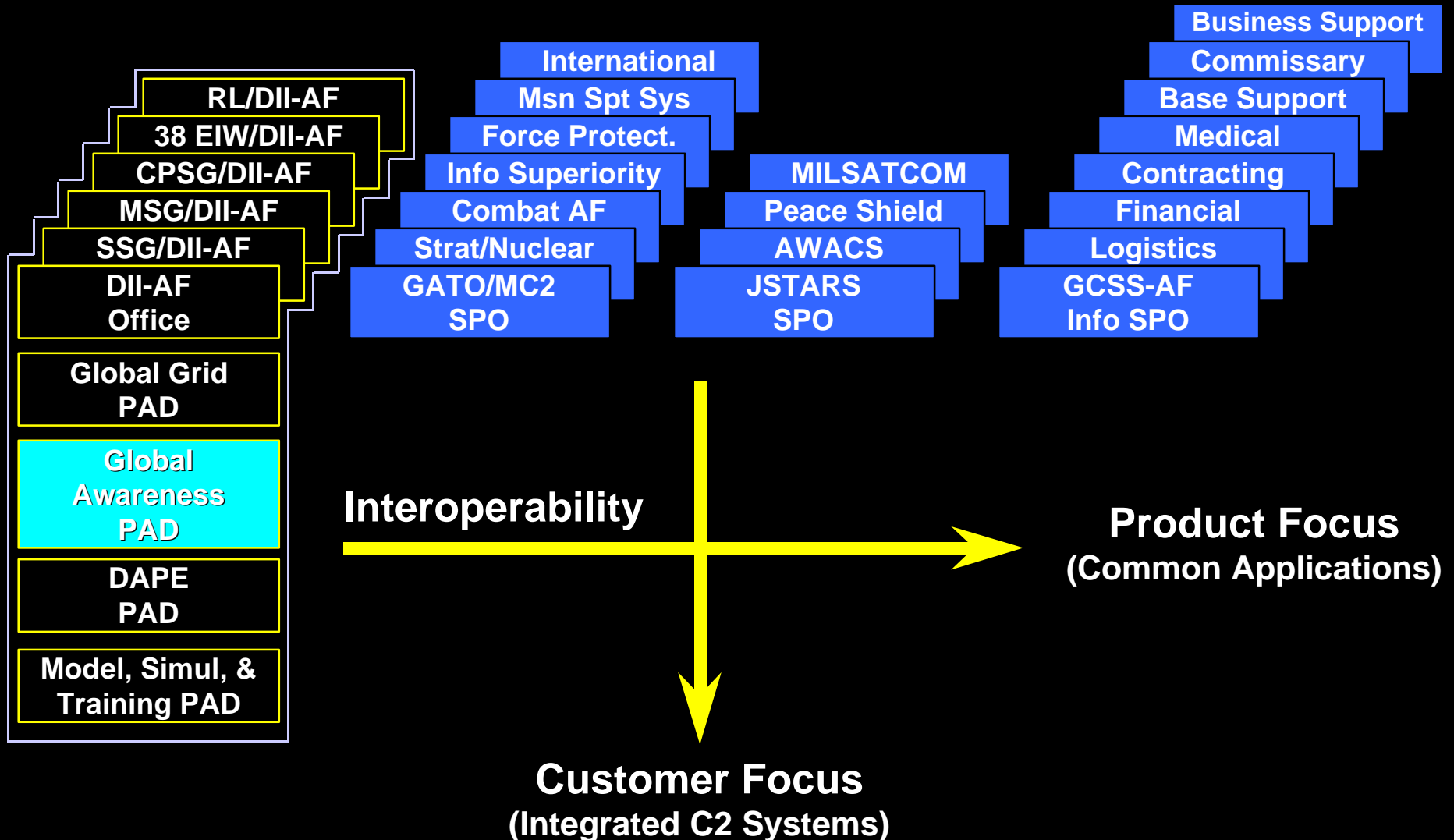
**Data Fusion &  
Common  
Picture**  
*Col R Brooks*

**Global Grid  
& Infrastructure**  
*Col Fellows*

# ESC Organization

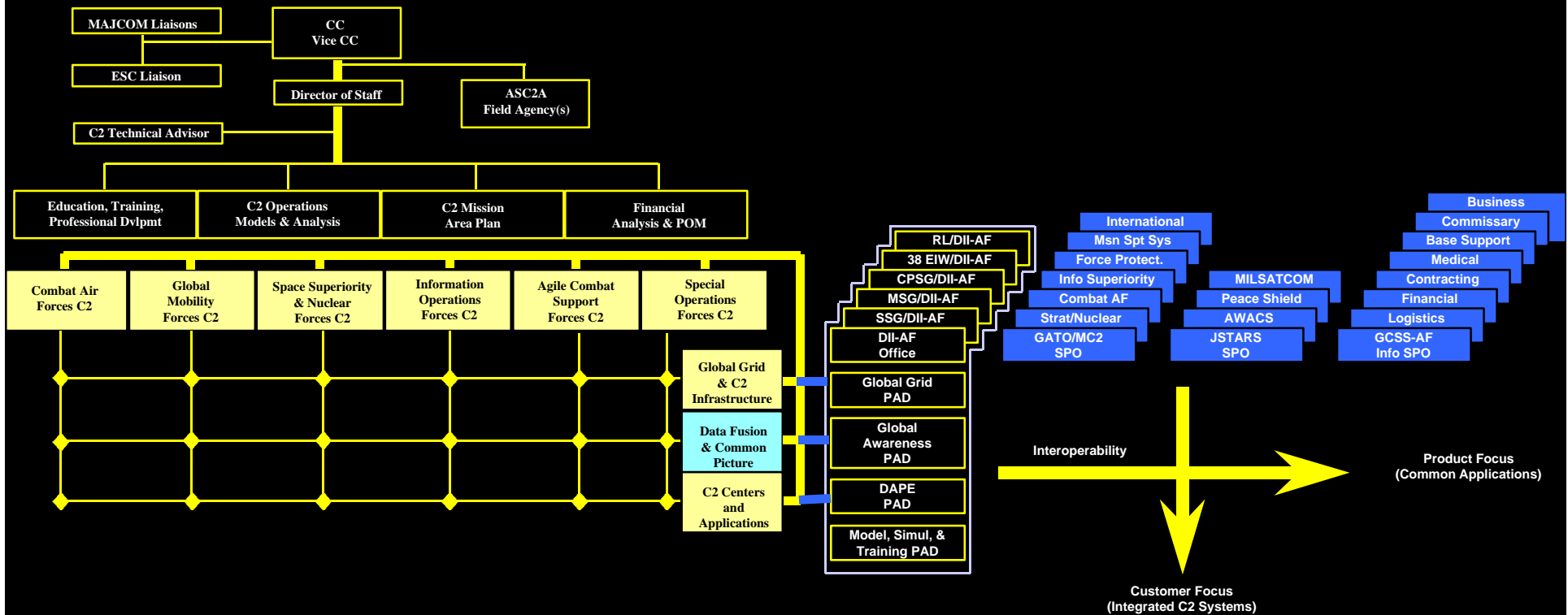


## *Global Awareness Product Area Directorate*



# The ASC2A & ESC Organizational Relationship

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# VISION



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**Provide the products, services, and technology base to enable the collection, fusion/correlation, and reporting of all information necessary for civilian government authorities, the military commanders, and warfighters to maintain tailored situational awareness in peace-time and wartime anywhere in the world.**



# MISSION



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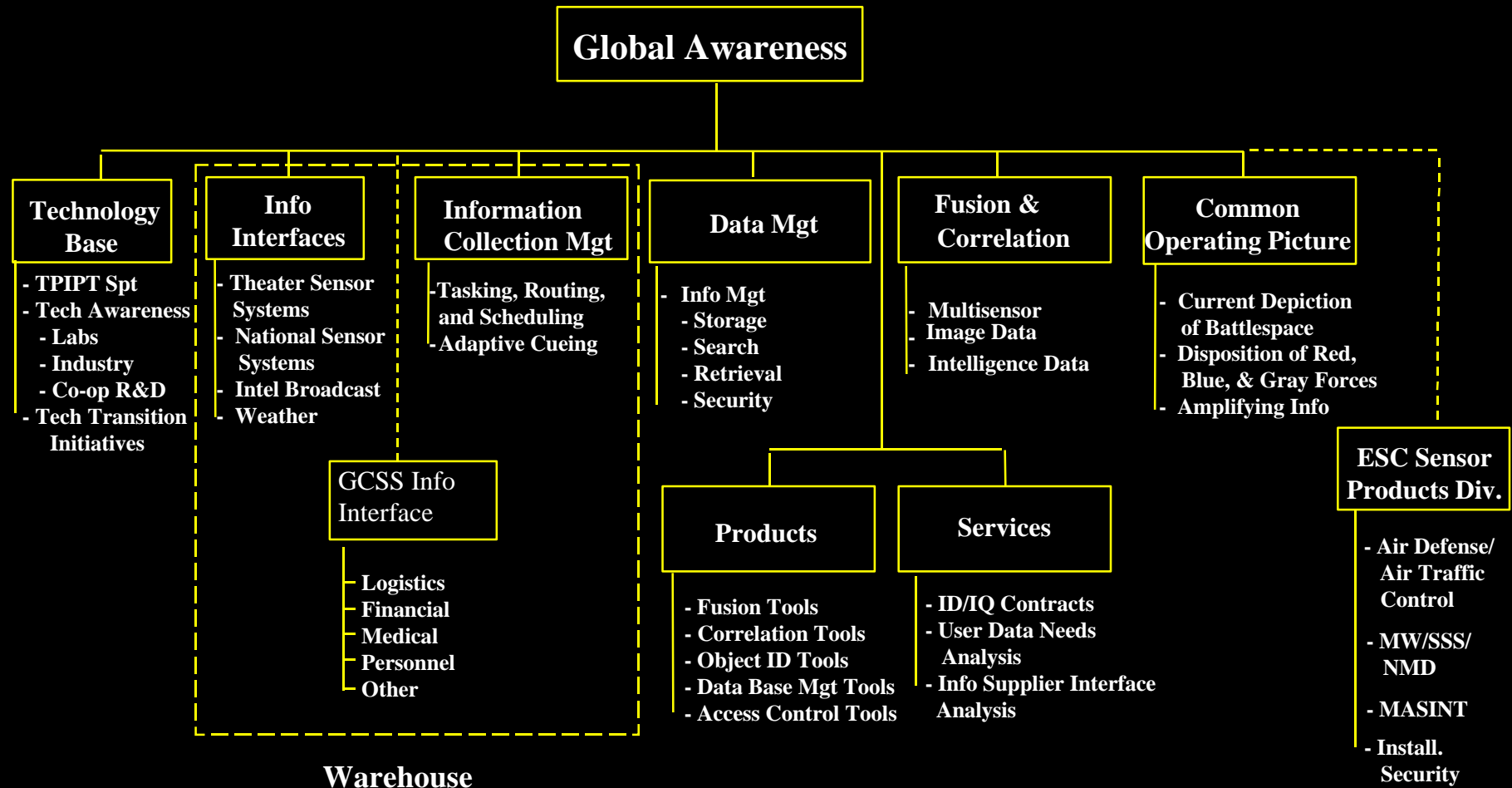
## *Global Awareness Product Area Directorate*

**The Global Awareness Product Area Directorate (GAPAD) will gather and integrate all information to produce a Common Operating Picture (COP) required by AF C2 users and Civil Authorities. This information shall be compliant with the DII Common Operating Environment. The GAPAD will also produce and sustain information gathering products not available from other sources.**

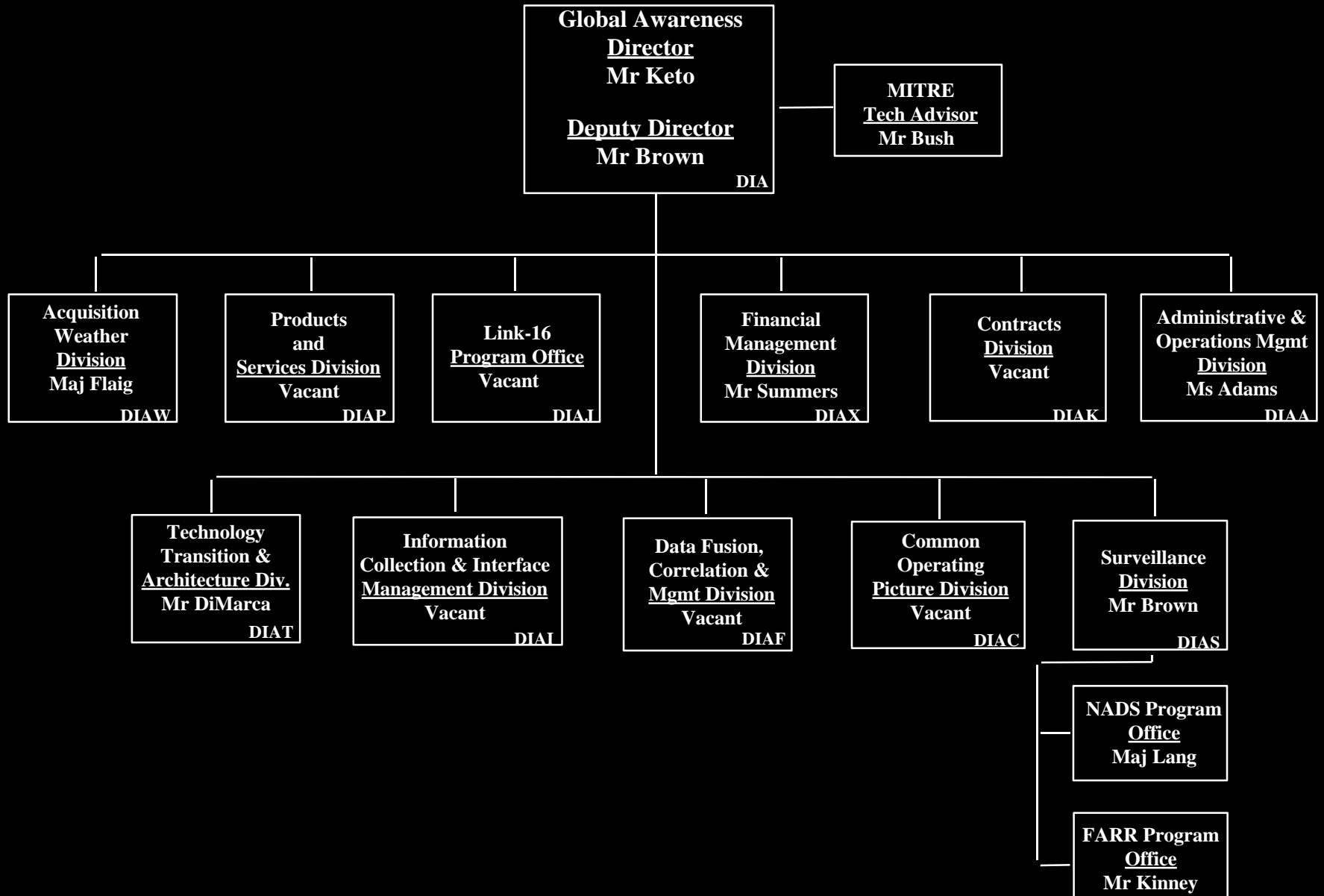
# Global Awareness PAD Functions



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# Global Awareness Product Area Directorate





# New Business Opportunities

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- ◆ Yet to be fully defined
- ◆ Areas of expertise contemplated:
  - **Fusion/correlation**
  - **Database access & retrieval**
  - **C2 User Understanding**
  - **Multi-level security**